

[Scope of Claim]

[Claim 1]

A current output DA converter circuit comprising:

a current output circuit;

5 a voltage source;

a data input portion; and

an output portion,

characterized in that digital formal data is inputted to the data input portion;

a constant voltage is applied from the voltage source to the output portion in the case

10 where the data in the data input portion takes a predetermined value; and

a current corresponding to a value of the data in the data input portion is applied from the current output circuit to the output portion in other cases.

[Claim 2]

A current output DA converter circuit comprising:

15 a current output circuit;

a voltage source;

a data input portion; and

an output portion,

characterized in that a plurality of switches are provided in series between the voltage

20 source and the output portion;

digital formal data is inputted to the data input portion; and

all of the plural switches are turned ON in the case where the bit data in the data input portion takes a predetermined value.

[Claim 3]

25 A current output DA converter circuit comprising:

a current output circuit;

a voltage source;

a data input portion; and

an output portion,

30 characterized in that digital formal data is inputted to the data input portion;

a current corresponding to a value of the data in the data input portion is applied from the current output circuit to the output portion; and

the voltage source and the output portion are short-circuited for a certain period in the case where the data in the data input portion takes a predetermined value.

35 [Claim 4]

A current output DA converter circuit according to any one of claims 1 to 3,

characterized in that the current output circuit includes a plurality of drive transistors; and each gate electrode of the plural drive transistors is electrically connected to each other and a switch is provided between the gate electrode and each drain electrode of the plural drive transistors.

5 [Claim 5]

A display device characterized by including the current output DA converter circuit according to any one of claims 1 to 4.

[Claim 6]

10 Electronic equipment characterized by including the current output DA converter circuit according to any one of claims 1 to 4.

[Claim 7]

Electronic equipment characterized by including the display device according to claim 5.

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